



#### The Positive Uses of Twitter

#### **CRISIS RESPONSE**

- Disaster relief
- Humanitarian Assistance
- Crisis monitoring

#### **PROMOTES:**

- Order and discourse
- Cooperative behavior
- Information sharing

# COMMUNITY DIALOGUE

- Anti-propaganda
- Rumor squelch
- Outreach

#### **PROMOTES:**

- Discussion expansion
- Spread of verifiable information

Goals: Improve DISASTER OPERATIONS
Improve COMMUNITY ENGAGEMENT





#### The Negative Uses of Twitter

From 2011 onward, ONR researchers began to see INCREASING USE of Social Media for NEGATIVE effects

#### **INFLUENCE**

- Propaganda
- Rebellion cry
- Hate speech

#### **PROMOTES:**

- Points of view
- Bandwagon effects
- Conflict and argument
- Mass protests
   Chao
   Goolsby, Rebecca. 2013. "On Crowdsourcing, Cybersecurity and Social Cyber-Attack"

**SOCIAL** 

#### **CYBER-ATTACK**

- Crowd manipulation
- Hysteria propagation

#### **PROMOTES:**

- Rumor Escalation
- Confusion
- Violence
- Chaos

**How would** These **IMPACT NAVY MISSIONS?** 





#### The New Threat Environment

#### Military operations today involve new threats and problems:

- The rise of non-state actors as significant, violent threats to human security and nation-state stability
- Covert state actors using non-state actors to threaten human security, infrastructure, and peace
- Potential emergency situations due to the spread of ebola and its destabilizing affect on nation-states





# Examples of threats that relate to military concerns

- ISIS uses social media to enhance its reputation (or brand), recruit fighters, and solicit funds to support state destabilization.
- Novorossiya uses social media to publicize its violent acts in Ukraine, supported by "information spetnaze" (special forces), threatening regional security in Eastern Europe.
- **Ebola**. Mobile phones in Africa spread rumors and hysteria about ebola, which leak onto social media platforms. These rumors led to the deaths of 8 health care workers in Sierra Leone.





## Keys to Understanding the NIE

- Technologies The Cyber World
- Social Relations Real World / Cyber World
- Socio-Technical Innovations
   Real World / Cyber World
- The Physical World The Real World of Events, Transactions, People and Things







# Two Twitter Tales: Why Strategic Communication Matters

- Boston Police / Boston Marathon Bombings
- New York Police Department / #myNYPD campaign





# **Socio-Technical Information Operations**

- Understanding the new cyber/social world and its implications for military operations
- Ability to acquire real-time, comprehensive understanding of information flow and its connection to emerging events
- Ability to manage the military operation's strategic message and communications
- Ability to plan, maneuver, and act effectively in the cyber/social and physical worlds





#### **Information Maneuvers**

- Discourse Suppression Maneuvers
- Amplification of Information Maneuvers
- Fabrication of Information Maneuvers
- Spin-Doctors and Influence Maneuvers





#### The Information "Spetznaze"

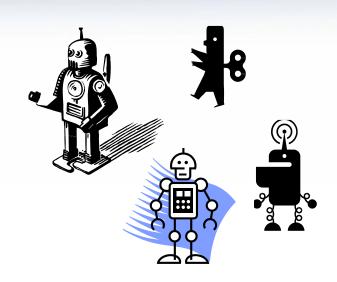
- St. Petersburg Times Article (2013)
- Impact of the Spetznaze Operations
  - Threadjacking as Maneuver
  - Trolling as Maneuver





#### **Amplification Maneuvers**

- The Social Bot / Botnet
  - Coded programs to spread information on all kinds of social media platforms
  - Occur in "armies"called "botnets"





#### What Bot Traffic Can Look Like

- High spreading hashtags
  - Viral topic
  - Common tag such as #news
- Targeted hashtags
  - Use of local language (Ucrania, for example, to reach a Spanish speaking audience)
- Repeated messages but no "Retweet" indicators





## Kiev Rumors: An Example

PAS BEAU. Kiev abat l'avion du voi MH17 de la Malaysia Airlines et accuse: http://t.co/15oDpqi6uE via @KamerunScoo
PAS BEAU. Kiev abat l'avion du voi MH17 de la Malaysia Airlines et accuse: http://t.co/ADp4TdFRKt via @KamerunScoo
PAS BEAU. Kiev abat l'avion du voi MH17 de la Malaysia Airlines et accuse: http://t.co/R9gSR6ubgs
PAS BEAU. Kiev abat l'avion du voi MH17 de la Malaysia Airlines et accuse http://t.co/gir30idziD
PAS BEAU. Kiev abat l'avion du voi MH17 de la Malaysia Airlines et accuse http://t.co/jbDJoRJDuY
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Dozens of bots deployed to spread The story that Kiev had shot down MH17, In French, Spanish, Indonesian and English.

Klev Deployed 27 Anti-Aircraft Launchers to E.Ukraine Ahead of MH17 Crash! http://t.co/gpP4VYT8uv

Klev Deployed 27 Anti-Aircraft Launchers to E.Ukraine Ahead of MH17 Crash! http://t.co/lhvpOLMzimX Interesting.....

Klev Deployed 27 Anti-Aircraft Launchers to E.Ukraine Ahead of MH17 Crash! http://t.co/lh5eKVqhp1

Klev Deployed 27 Anti-Aircraft Launchers to E.Ukraine Ahead of MH17 Crash! http://t.co/geNXXVrjuY

Klev Deployed 27 Anti-Aircraft Launchers to E.Ukraine Ahead of MH17 Crash! http://t.co/skBsmLyc5p

Klev Deployed 27 Anti-Aircraft Launchers to E.Ukraine Ahead of MH17 Crash! http://t.co/yqeJim11Am

They were easily discoverable by most commercial systems drawing from the Twitter API and then re-sorted to show the duplicates.

Each URL has been generated to mask the fact that they're an orchestrated SET.

DISTRIBUTION STATEMENT A. Approved for public release



# **How Botnets Amplify**

- Tides of messages are sent out in order to outcompete other messages in search algorithms by using flooding the algorithms
- These messages direct readers to "spun" and fabricated messages, making those messages seem more representative or "real"
- They may attempt to push topics up so that they appear in Twitter trends or similar statistics (tweets that only have hashtags in them, for example).





### **Hybrid Efforts**

 The combination of botnets with information "special forces" helps to deter automated detections of "dissemination" campaigns





# A "likely bot" or a hybrid





- Same story repeated many times.
- Retweets of bot accounts
- Frequent tweets
- Odd messages that make no sense (to hide better from algorithms)
- In this example, the account ONLY tweets RT.Com and ActualidadRT.Com stories, nothing else.
- Bots are hard to find even with special tools!





#### **Fabrication Maneuvers**

- They don't have to make sense
- They don't have to be credible
- They just need to be sensational ENOUGH and credible ENOUGH to monopolize discourse

The #MH17 Rumors





# The Spin Doctor Maneuver

- Captivating statements
- Encouraging "noise"
- Creating "buzz"
- Mix fabrication, misdirection, and partial facts to create a false impression





# Examples of Spin Maneuvers

- Putin immediately blamed Kiev for the MH17 incident a fairly odd but highly captivating statement that buzzed through Twitter in the midst of
- Strelkov, leader of the militias that shot the plane down, put out a statement alleging that there were only dead bodies in the plane – widely reported in Russian media and spread in Twitter
- Actualidad published an account of a hoaxster, a "Spanish traffic controller in Kiev" who blamed Ukraine military for the attack
  - This story widely spread on Twitter by Actualidad and bots
  - If you actually read the story (in Spanish), it specifically points out that the story is unlikely to be true because non-Ukrainians are legally barred from employment as air traffic controllers in Ukraine, at the bottom of the article.





# Countering Information Operations: What's Needed

- Discovery of attempts to amplify, spin, misdirect and conduct offensive maneuvers in the information space
- New methods of analysis to deconstruct and neutralize offensive information maneuvers
- Development of effective strategic communications campaigns to counter these maneuvers
- Mobilization of networks to amplify and outcompete information maneuvers of competitors





#### Needed:

- Technology to reveal information maneuvers
- Research to improve methods of discovering and countering these maneuvers
- Training and education of military personnel to understand new information flows, thwart rumor and hysteria propagation, and develop new information campaign capabilities for the NIE.



# Rules for Success in Countering Information Maneuvers

- Don't lie, spin, or doctor evidence.
  - The public needs to know who to trust. It is better to say nothing than to add to the noise.
- There are legitimate ways to amplify truthful, responsible messages.
  - Develop good networks (like Boston Police)
  - Be authentic (like Boston Police)
  - Develop situated trust
- Responsible information networks are stronger and more resilient than deceptive networks – and ultimately have a longer reach and greater power.
- Fill the space with strong strategic communication.





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